



AFTON MINES LTD. (N.P.L.)

ANNUAL REPORT 1978

DIRECTORS

A.P. Fawley
R.E. Hallbauer
D.L. Hiebert
N.B. Keevil
N.B. Keevil, Jr.
J.D. Leishman
J.D. Little

OFFICERS

N.B. Keevil, Chairman of the Board
R.E. Hallbauer, President
D.L. Hiebert, Vice-President and Treasurer
J.D. Munroe, Secretary
G.R. Shipley, Controller
M. Heap, Assistant Controller
N.B. Rudden, Assistant Secretary

MINE PERSONNEL

J.M. Anderson, Mine Manager
G.G. Bell, Superintendent of Employee Relations
J.M. Bell, Plant Superintendent
T.M. Duggan, Chief Accountant
M.P. Lipkewich, Pit Superintendent
J. Lovering, Mill Superintendent
J. McDonald, Smelter Superintendent
B.R. Williams, Chief Engineer

Head Office

1199 West Hastings Street, Vancouver, B.C. V6E 2K5

Mine Office

P.O. Box 937, Kamloops, B.C. V2C 5N4

Registrar and Transfer Agent

The Canada Trust Company, Vancouver, B.C., and Toronto, Ontario

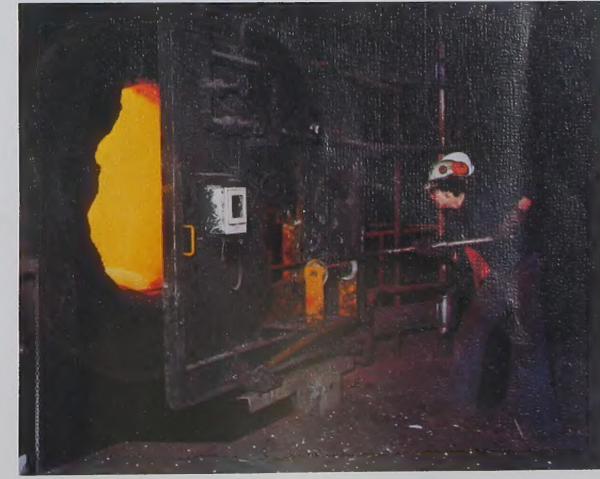
Auditors

Coopers & Lybrand, Vancouver, B.C.

Annual General Meeting of Shareholders

Victoria Room at the Holiday Inn, 1133 West Hastings St., Vancouver, B.C.
on March 31, 1979, at 2:00 p.m. (Pacific Standard Time).

Photos by W.J. Hadgkiss.



To the Shareholders:

1978 was an important year for Afton, with the mine and smelter being commissioned officially on April 27.

The project was completed after a construction expenditure of \$85 million (U.S.), within 9% of the planned expenditure despite continued inflation, a province-wide work stoppage early in the construction period and delays caused by trade union jurisdictional disputes during the later stages.

This was achieved because of hard work by a lot of people. This includes the labour force, the majority of whom performed energetically and well, and who are equally frustrated by jurisdictional disputes. It includes Wright Engineers, Dravo Corporation, Commonwealth Construction and the dedicated team of engineers in Teck Corporation, who designed and managed the project.

The plant was considered to be in commercial production on May 1, 1978, and production revenue and costs from that date are reflected in the financial statements. Revenue is calculated on blister copper produced and on concentrates sold. Concentrates not sold are valued at the cost of production.

Results in the first five months of operation, to the fiscal year-end of September 30, 1978, were satisfactory. Operating profit was \$12,995,000, resulting in net earnings of \$2,951,000, or 78¢ per share. Production during this period was 21,372,000 pounds of copper and 20,733 ounces of gold.

Metal prices during the period averaged 66 U.S. cents for copper, and \$203 U.S. for gold. The price of copper during this period was not at a satisfactory level, and the fact we were able to show a reasonable operating profit is in part because of the unusual quality of the orebody; average daily mill throughput was 7,485 tons grading 0.97% Cu and 0.02 ounces of gold per ton. It was also due to excellent performance by our operating team, who were able to hold costs to 3% below budget for the period.

MINING:

Preparation of the open pit began in April, 1977. By the end of September 1977, 5,650,000 tons of waste and 441,000 tons of ore had been mined. During the five month fiscal period, production from the mine consisted of 1,197,000 tons of ore, 5,843,000 tons of waste and 371,000 tons of low grade ore which were stockpiled.

MILLING:

The concentrator began tune-up operations on December 8, 1977, and has operated continuously since that date. Throughput to

September 30 was 2,113,000 tons, for an average of 7,162 tons per day. Recovery during the full period averaged 86.2%, with production of 34,780,000 pounds of copper and 32,973 ounces of gold in concentrate.

From May 1 to September 30, mill throughput averaged 7,485 tons per day, with a copper recovery of 87%. Production was 21,372,000 pounds of copper and 20,733 ounces of gold.

Milling procedure includes normal flotation to recover fine native copper, as well as a line of tables to recover coarser material. Production from the flotation circuit during the full period was 22,800 tons with an average concentrate grade of 53% Cu. Production from the gravity circuit was 6,300 tons grading 84% Cu.

SMELTING:

The smelter began tune-up operations on March 23, 1978. Production to September 30 was 10,700,000 pounds of copper in blister grading 99% Cu.

The smelter employs a process known as Top Blown Rotary Conversion not previously used on copper concentrate. Concentrate is fed directly to the conversion furnace, fueled by natural gas, and is melted in heats of approximately eight hours with various purifying additives, before being poured into a casting circuit as blister copper.

The environmental control end of the smelter represented a major portion of the capital cost of this unit, at \$5,000,000. The environmental control equipment has operated satisfactorily in that all conditions of our pollution control permits have been met.

Tune-up of a new process like this is a gradual task. Although the furnace has operated well from the start, the smelter experienced considerable down time in the early stages in order to correct relatively minor but critical mechanical problems in both the casting and environmental control sections. These are now operating smoothly, and the remaining key area for attention is in improved brick life to increase the number of heats between relining cycles.

SALES:

The market for spot copper concentrate has been strong, and we have been able to dispose of excess concentrate, beyond that processed in the smelter, at favourable terms.

Sales from the start of operations have consisted of 5,317 tons of copper as blister and 20,020 tons as concentrate. The gold content was 9,927 and 20,536 ounces, respectively.

During the period from May to September 30, 14,662 tons of

concentrate were sold containing 8,123 tons of copper and 16,998 ounces of gold, and 4,911 tons of blister copper were sold containing 8,317 ounces of gold.

The blister copper was sold under long term contract to BICC and Delta Metals of the U.K. The concentrate was sold through agents to several different smelters.

FINANCIAL:

During the five months from May 1 to September 30, revenue from sale of blister and concentrate was \$25,817,000. Operating costs were \$12,822,000 for an operating profit of \$12,995,000. After deducting interest of \$5,190,000, amortization of \$2,814,000 and providing for \$1,932,000 in deferred taxes, net earnings before extraordinary items were \$3,059,000 or 81¢ a share.

Assigning gold revenue and costs to copper, the average sales revenue per pound of copper was \$1.00, and the average operating cost 50¢ a pound.

The company's debt position stood at \$95,574,000, as of September 30. No repayments of principle were made during the period, with operating profit being employed to establish the necessary working capital.

At current interest rates, the annual interest cost on these loans amounts to \$14,681,625. During the year an attempt was made to reduce this by converting \$80 million (U.S.) to income debentures. This would have enabled a cash saving of approximately \$4,400,000 a year at current interest rates, which could have been applied to reduce the principle amount owing and retire Afton's indebtedness more quickly.

Unfortunately, this arrangement could not be completed by Revenue Canada's deadline of September 30, 1978, and the Federal Government has now eliminated this method of financing, as well as the similar use of term preferred shares.

We believe that this method of financing should be reinstated, at least for capital investment in new plant and equipment, because it represented the only remaining source of low cost capital with which to create new production and new jobs. Otherwise, the current high level of interest rates will make it difficult to finance the kind of capital investment Canada needs to improve its economic situation, and will continue to impose a hardship on otherwise sound companies like Afton.

We will continue to press for this reinstatement and, if possible, to try to reduce Afton's interest costs in this way.

At year end the Afton project employed 325 people. Relations with the hourly rated employees and their union, the United Steel Workers of America, were excellent.

IN MEMORIAM:

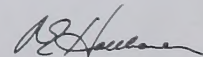
J.C. Parlee, previously Executive Vice President of Inco Ltd. and a director of Afton, passed away on August 17, 1978. Mr. Parlee made a strong contribution to the Canadian mining industry during his career, and his wise counsel as a member of the Afton board will be sadly missed.

We would also like to note again the contributions of E.P. Chapman Jr. and L.G. White, both of whom passed away in 1977. Both gentlemen were consulting engineers and directors of Afton during construction, and their guidance during this important period was appreciated.

STAFF:

A great many people — engineers, geologists, labour and financial experts, contributed heavily to the successful completion of this project, and it is impossible to list them all. We would like to acknowledge particular credit to C.H. Lighthall, Construction Superintendent, and his team — as well as to J.M. Anderson, Mine Manager, and his staff, all of whom worked diligently and tirelessly to make this a successful mine.

On behalf of the board



Vancouver, B.C.
February 8, 1979

R.E. Hallbauer
President

CONSOLIDATED BALANCE SHEET AS AT SEPTEMBER 30, 1978

ASSETS	1978	1977
	\$ in thousands	\$ in thousands
CURRENT ASSETS		
Cash	1,616	3,037
Concentrates, blister and settlements receivable (notes 3 and 5)	11,370	37
Accounts receivable	461	127
Supplies and prepaid expenses — at cost	3,126	3,201
	<u>16,573</u>	<u>3,201</u>
PROPERTY, PLANT AND EQUIPMENT (notes 4 and 5)	89,505	76,289
	<u>106,078</u>	<u>79,490</u>

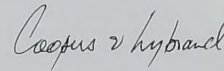
LIABILITIES	1978	1977
	\$ in thousands	\$ in thousands
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	3,900	1,656
Bank term loan — current portion	7,107	6,434
	<u>11,007</u>	<u>8,090</u>
LONG-TERM DEBT (note 5)	88,467	69,559
DEFERRED INCOME AND MINING TAXES	1,932	
	<u>101,406</u>	<u>77,649</u>
SHAREHOLDERS' EQUITY		
CAPITAL STOCK		
Authorized —		
5,000,000 shares without par value		
Issued and fully paid —		
3,787,172 shares	1,920	1,920
RETAINED EARNINGS (DEFICIT) (note 8)	2,752	(79)
	<u>4,672</u>	<u>1,841</u>
	<u>106,078</u>	<u>79,490</u>

AUDITORS' REPORT TO
THE SHAREHOLDERS

We have examined the consolidated balance sheet of Afton Mines Ltd. (N.P.L.) as at September 30, 1978 and the consolidated statements of earnings, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the company as at September 30, 1978 and the

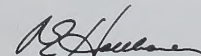
results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

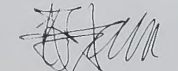


Chartered Accountants

Vancouver, B.C.
November 10, 1978

APPROVED BY THE DIRECTORS

 Director

 Director

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

FOR THE YEAR ENDED SEPTEMBER 30, 1978

	1978 \$	1977 \$
	in thousands	
SOURCE OF WORKING CAPITAL		
Net earnings before extraordinary item	3,059	
Add items not affecting working capital:		
Depreciation, depletion, amortization	2,814	
Deferred income and mining taxes	<u>1,932</u>	
From operations	7,805	
Loans from customers	16,607	
Term bank loan	2,180	56,732
Advances from Teck Corporation	120	172
Capital stock		<u>80</u>
	<u>26,712</u>	<u>56,984</u>
USE OF WORKING CAPITAL		
Refinancing costs	108	
Reorganization costs	120	
Property, plant and equipment	16,029	56,324
Bank term loan currently maturing		<u>6,434</u>
	<u>16,257</u>	<u>62,758</u>
INCREASE (DECREASE) IN WORKING CAPITAL	10,455	(5,774)
WORKING CAPITAL (DEFICIENCY) AT BEGINNING OF YEAR	<u>(4,889)</u>	<u>885</u>
WORKING CAPITAL (DEFICIENCY) AT END OF YEAR	<u>5,566</u>	<u>(4,889)</u>
REPRESENTED BY:		
Current assets	16,573	3,201
Current liabilities	<u>11,007</u>	<u>8,090</u>
WORKING CAPITAL (DEFICIENCY) AT END OF YEAR	<u>5,566</u>	<u>(4,889)</u>

CONSOLIDATED STATEMENT OF RETAINED EARNINGS

FOR THE YEAR ENDED SEPTEMBER 30, 1978

	1978 \$	1977 \$
	in thousands	
BALANCE AT BEGINNING OF YEAR	(79)	(79)
Net earnings for the year	2,951	
Reorganization costs	<u>(120)</u>	
BALANCE AT END OF YEAR	<u>2,752</u>	<u>(79)</u>

CONSOLIDATED STATEMENT OF EARNINGS

FOR THE YEAR ENDED SEPTEMBER 30, 1978

	\$ in thousands (5 months — note 2)
REVENUE	
Concentrates and blister	<u>25,817</u>
EXPENSES	
Concentrate and blister production (note 6)	12,822
Interest on long-term debt	5,121
Other interest	69
Depreciation, depletion and amortization	<u>2,814</u>
	<u>20,826</u>
EARNINGS BEFORE INCOME AND MINING TAXES	4,991
DEFERRED INCOME AND MINING TAXES	<u>1,932</u>
NET EARNINGS BEFORE EXTRAORDINARY ITEM	3,059
Refinancing costs	<u>108</u>
NET EARNINGS FOR THE YEAR	<u>2,951</u>
EARNINGS PER SHARE:	
Before extraordinary item	\$.81
After extraordinary item	<u>\$.78</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED SEPTEMBER 30, 1978

1. SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the financial statements of the company's wholly owned subsidiary, Sugarloaf Ranches Limited.

Translation of Foreign Currencies

Assets and liabilities denominated in foreign currencies are translated into Canadian funds. Current assets and liabilities are converted at year-end rates, other assets (and related accumulated depreciation, depletion and amortization) and liabilities at the rates prevailing at the date of acquisition. Amounts (other than depreciation, depletion and amortization) appearing in the statement of earnings are translated at the average exchange rates for the year. Exchange gains or losses arising on conversion between currencies are included in net earnings.

Concentrates, Blister and Settlements Receivable

Concentrates are recorded at estimated net realizable value except where there is no contract for sale in which case they are recorded at the lower of cost and net realizable value. Blister and settlements receivable are recorded at estimated net realizable value.

Cost is determined on an average cost basis. Net realizable value is based upon the latest available metal prices, weights and assays.

Property, Plant and Equipment

Buildings, equipment, and mobile equipment are depreciated on a unit of production basis over their estimated useful life, commencing May 1, 1978.

Mineral properties, rights and deferred costs are amortized on a unit of production basis over the estimated life of the orebody, commencing May 1, 1978.

Income and Mining Taxes

The company records income and mining taxes on the tax allocation basis. Differences between the amount of expense reported for tax purposes and accounting purposes results in deferred income and mining taxes which are shown separately in the statement of earnings and balance sheet. Deferred income taxes relate primarily to depreciation and depletion of property, plant and equipment. Investment tax credits reduce the current year's charge for income taxes.

2. COMMENCEMENT OF OPERATIONS

On May 1, 1978, the company considered itself to be in commercial production and accordingly all production revenue and expenses from that date are reflected on the statement of earnings. Prior to that date the company was in the preproduction phase and all expenses (net of revenue) were capitalized.

3. CONCENTRATES, BLISTER AND SETTLEMENTS RECEIVABLE

	\$ in thousands
Concentrates	893
Blister	3,237
Settlements receivable	<u>7,240</u>
	<u>11,370</u>

4. PROPERTY, PLANT AND EQUIPMENT

	1978		1977	
	Cost	Accumulated depreciation, depletion and amortization (note 2)	Net	Cost
	\$ in thousands	\$ in thousands	\$ in thousands	\$ in thousands
Buildings and equipment	65,363	1,637	63,726	53,667
Mobile equipment	15,980	899	15,081	13,161
Mineral properties, rights, deferred costs and Sugarloaf Ranch	<u>10,976</u>	<u>278</u>	<u>10,698</u>	<u>9,461</u>
	<u>92,319</u>	<u>2,814</u>	<u>89,505</u>	<u>76,289</u>

5. LONG-TERM DEBT

a) Long-term debt is comprised of:

Term bank loan of U.S. \$75,000,000 with varying interest rates but presently at 130% of New York prime repayable over eight years after commencement of production, subject to acceleration in the event of excess earnings as defined in the loan agreement

Term loans of U.S. \$15,000,000 from customers of the blister production. Interest is based on the borrowing rates of the lenders and is repayable over two years commencing when the term bank loan is repaid

Term loan from Teck Corporation to acquire and maintain Sugarloaf Ranches Limited. Repayable on December 31, 1985, with interest at prime plus ¾%

Current portion of long-term debt

	1978 \$	1977 \$
	in thousands	
	78,149	75,295
	16,607	
	<u>818</u>	<u>698</u>
	<u>95,574</u>	<u>75,993</u>
	<u>7,107</u>	<u>6,434</u>
	<u>88,467</u>	<u>69,559</u>

Minimum amounts, based on current rates of exchange, estimated to meet repayment provisions in each of the next five years:

	\$
1979	7,107,000
1980	15,412,000
1981	16,597,000
1982	13,040,000
1983	10,030,000

b) Security for long-term debt

The term bank loan and the customers' loans are respectively secured by a first and second fixed and floating charge over all of the company's assets.

The loan from Teck Corporation is secured by all the assets of Sugarloaf Ranches Limited.

c) Foreign currency loans

The loans in foreign currency aggregating Cdn. \$94,756,000 (U.S. \$90,000,000) if converted at the rates of exchange prevailing at September 30, and November 10, 1978 would be approximately Cdn. \$107,000,000 and Cdn. \$106,000,000 respectively.

6. SMELTER INCENTIVE

In accordance with the Copper Smelting and Refining Act the Province of British Columbia has entered into an agreement with the company to pay until 1983 five cents per kilo of copper smelted, up to a maximum of \$500,000 in any fiscal year. During the period the company received \$223,000 under the agreement which has been applied to reduce the cost of concentrate and blister production.

7. DIRECTORS' AND SENIOR OFFICERS' REMUNERATION

The company has seven directors and six officers, three of whom are also directors. No remuneration was paid to directors or officers during 1977 or 1978. Remuneration to the five highest paid employees amounted to \$183,500 in 1978. (1977 \$144,500).

8. DIVIDEND RESTRICTION

Under the terms of the term bank loan, the company shall not declare or pay any dividends without the prior written consent of the banks.

9. DATE OF APPROVAL OF FINANCIAL STATEMENTS

These financial statements were approved by the President and the Chief Financial Officer of the Company on November 10, 1978.

